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Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/630,077
				Filing Date	
				First Named Inventor	Barker et al.
				Art Unit	2881
				Examiner Name	Nikita Wells
Sheet	1	of	4	Attorney Docket Number	02W102

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

**Examiner
Signature**

Nicola Wells

Date
Considered

July 21 '04

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Ent. Office that issued the document, by the two-digit code (WIPO Standard ST. 16) of Japanese patent document, and the year of the reign of the Emperor must precede the serial number of the patent document. ⁸Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁹Applicant is to place a check mark here if English language Translation is attached.

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				Application Number	
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				First Named Inventor	Barker et al.
				Group Art Unit	2881
				Examiner Name	Nikita Wells
Sheet	2	of	4	Attorney Docket Number	02W120

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	† ²
<i>AKW</i>	1	Weinstein, J.D. and K.G. Libbrecht, "Microscopic Magnetic Traps for Neutral Atoms", <u>Physical Review A</u> , The American Physical Society, Vol. 52, No. 5, November 1995, pp. 4004-4009.	
<i>AKW</i>	7	Nieto, Michael Martin, et al., "Dense Antihydrogen: Its Production and Storage to Envision Antimatter Propulsion", Los Alamos Report LA-UR-01-3760, December 12, 2001, pp. 1-12.	
<i>AKW</i>	8	Howell, Richard H., "The Future: Intense Beams", Chapter 10 in <u>Positron Beams and Their Applications</u> , Paul Coleman Ed., World Scientific Publishing Co., Singapore, 2000, pp. 307-322.	
<i>AKW</i>	9	Cassidy, D.B. and J.A. Golovchenko, "The Bose-Einstein Condensation of Positronium in Submicron Cavities", Chapter 6 in <u>New Directions in Antimatter Chemistry and Physics</u> , C.M. Surko and F.A. Gianturco, Eds., Kluwer Academic Publishers, Netherlands, 2001, pp. 83-99.	
<i>AKW</i>	10	Mills, Allen Paine, Jr., "Positronium Molecule Formation, Bose-Einstein Condensation and Stimulated Annihilation", <u>Nuclear Instruments and Methods in Physics Research B</u> , No. 192, Elsevier Science B.V., 2002, pp. 107-116.	
<i>AKW</i>	11	Platzman, P.M. and A. P. Mills, Jr., "Possibilities for Bose Condensation of Positronium", <u>Physical Review B</u> , Vol. 49, No. 1, 1 January 1994, pp. 454-458.	
<i>AKW</i>	12	Saito, Haruo and Toshio Hyodo, "Cooling and Quenching of Positronium in Porous Material", Chapter 7 in <u>New Directions in Antimatter Chemistry and Physics</u> , C.M. Surko and F.A. Gianturco, Eds., Kluwer Academic Publishers, Netherlands, 2001, pp. 101-114.	
<i>AKW</i>	13	Ackerman, J., et al., "Long-Lived States of Positronium in Crossed Electric and Magnetic Fields", <u>Physical Review Letters</u> , The American Physical Society, Vol. 78, No. 2, 13 January 1997, pp. 1999-202.	
<i>AKW</i>	14	Schmelcher, P., et al., "Stabilization of Matter-Antimatter Atoms in Crossed Electric and Magnetic Fields", <u>Nuclear Instruments and Methods in Physics Research B</u> , No. 143, Elsevier Science B.V., 1998, pp. 202-208.	
<i>AKW</i>	15	Schertzer, "Positronium in Crossed Electric and Magnetic Fields: The Existence of a Long-Lived Ground State", <u>Physical Review A</u> , The American Physical Society, Vol. 58, No. 2, August 1998, pp. 1129-1138.	
<i>AKW</i>	16	Karlson, Antonella and Marvin H. Mittleman, "Stabilization of Positronium by Laser Fields", <u>Journal of Physics B</u> , Vol. 29, 1996, IOP Publishing, U.K., pp. 4609-4623.	

Examiner Signature	<i>Nikita Wells</i>	Date Considered	<i>July 21, 2004</i>
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				Group Art Unit	2881
				Examiner Name	Nikita Wells
Sheet	3	of	4	Attorney Docket Number	02W120

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T ²
<i>NWS</i>	19	Wallen, P. and W.A. Mahoney, "The Postronium Radiative Combination Spectrum: Calculation in the Limit of Thermal Positrons and Low Densities", <u>The Astrophysical Journal</u> , Vol. 465, July 1, 1996, The American Astronomical Society, USA, pp. 473-486.				
	20	Baldwin, George C. and Johndale C. Solem, "Recoilless Gamma-Ray Lasers", <u>Review of Modern Physics</u> , Vol. 69, No. 4, October 1997, The American Physical Society, pp. 1085-1117.				
	25	Liang, Edison P. and Charles D. Dermer, "Laser Cooling of Positronium", <u>Optics Communication</u> , Vol. 65, No. 6, 13 March 1988, Elsevier Science Publishers B.V., pp. 419-424.				
	26	John, Sajeev and Jian Wang, "Quantum Optics of Localized Light in a Photonic Band Gap", <u>Physical Review B</u> , Vol. 43, No. 16, 1 June 1991, The American Physical Society, pp. 12 772-12 789.				
	27	John, Sajeev and Jian Wang, "Quantum Electrodynamics Near a Photonic Band Gap, Photon Bound States and Dressed Atoms", <u>Physical Review Letters</u> , Vol. 64, No. 5, 14 May 1990, The American Physical Society, pp. 2418-2421.				
	28	John, Sajeev and Tran Quang, "Photon-Hopping Conduction and Collectively Induced Transparency in a Photonic Band Gap", <u>Physical Review A</u> , Vol. 52, No. 5, November 1995, The American Physical Society, pp. 4083-4088.				
	29	John, Sajeev, "Quantum Optical Spin-Glass State of Impurity Two-Level Atoms in a Photonic Band Gap", <u>Physical Review Letters</u> , Vol 76, No. 8, 19 February 1996, The American Physical Society, pp. 1320-1323.				
	30	Quang, Tran, et al., "Coherent Control of Spontaneous Emission Near a Photonic Band Edge: A Single-Atom Optical Memory Device", <u>Physical Review Letters</u> , Vol 79, No. 26, 29 December 1997, The American Physical Society, pp. 5238-5241.				
	31	John, Sajeev and Kurt Busch, "Photonic Bandgap Formation and Tunability in Certain Self-Organizing Systems", <u>Journal of Lightwave Technology</u> , Vol. 17, No. 11, November 1999, pp. 1931-1943.				
	32	Lin, Shawn-Yu and J.G. Fleming, "A Three-Dimensional Optical Photonic Crystal", <u>Journal of Lightwave Technology</u> , Vol. 17, No. 11, November, 1999, pp. 1944-1947.				
	33	Roundy, David and John Joannopoulos, "Photonic Crystal Structure with Square Symmetry with each Layer and a Three-Dimensional Band Gap", <u>Applied Physics Letters</u> , American Institute of Physics, Volume 82, No. 22, 2 June 2003, pp. 3835-3837.				

Examiner Signature	<i>Nikita Wells</i>	Date Considered	<i>July 21, 2004</i>
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				First Named Inventor	Barker et al.
				Group Art Unit	2881
				Examiner Name	Nikita Wells
				Attorney Docket Number	02W102
Sheet	4	of	4		

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Signature *Auditor Kelly* **Date Considered** *July 21, 2004*

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